

POPULATION SERVED BY UNFILTERED SURFACE WATER SYSTEMS AT RISK FROM MICROBIOLOGICAL CONTAMINATION

What does the indicator tell us?

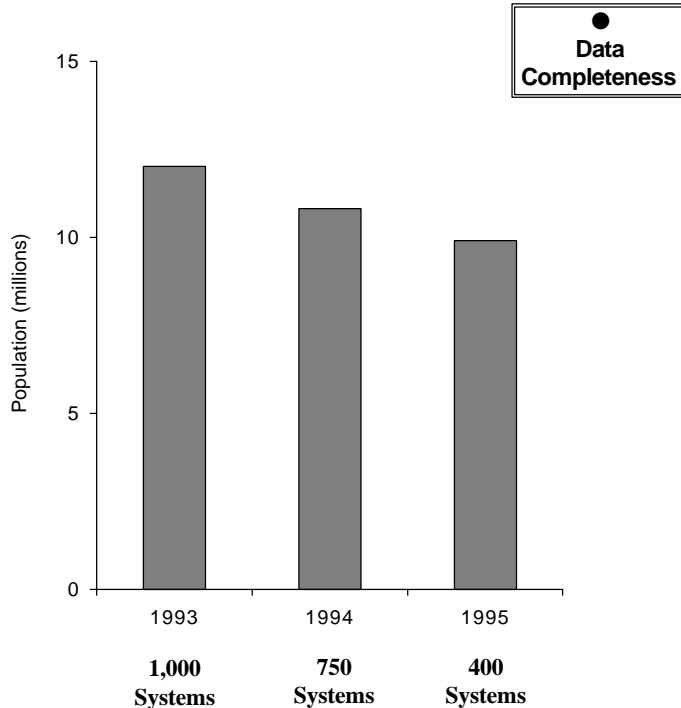
Drinking water systems supplied by surface waters can sometimes withdraw water that contains harmful levels of disease-causing microbiological contaminants, such as *Giardia lamblia*, *Legionella*, and viruses. Under the Surface Water Treatment Rule (SWTR), EPA and the states require all inadequately protected drinking water systems using surface water sources to install filtration and disinfection treatment to remove these microbiological contaminants from the drinking water. Compliance with the rule will dramatically reduce the probability of human exposure to harmful levels of microbiological contaminants from surface water sources.

This indicator displays the population provided water by unfiltered surface water systems that did not comply with the SWTR requirements that went into effect in 1993. Over 12 million people were provided drinking water from more than 1,000 unfiltered community water systems not in compliance with the SWTR in 1993. These numbers decreased in 1995, with approximately 9.9 million people being provided drinking water from 400 systems not in compliance with the rule.

How will the indicator be used to track progress?

EPA's Office of Ground Water and Drinking Water, in coordination with the Office of Enforcement and Compliance Assurance (OECA), will use the Safe Drinking Water Information System (SDWIS) to track both the number of systems in non compliance with

INDICATOR 2: Population Served by Unfiltered Surface Water Systems at Risk from Microbiological Pollution



Source: State data in EPA Safe Drinking Water Information System, 1994

Proposed Milestone: By 2005, every person served by a public water system that draws from an unprotected river, lake, or reservoir will receive drinking water that is adequately filtered.

the SWTR and the population served by these systems. States report this information to EPA on a quarterly basis, in accordance with regulations governing delegation of the drinking water program to the states.

This indicator uses the SWTR compliance program status as a surrogate measure of the risk to the population from using drinking water from inadequately protected water sources. This program evaluation is being undertaken as a pilot project for EPA under the Government Performance and Results Act, which requires all federal agencies to have a strategic planning process including clearly stated goals and indicators to measure them.

What is being done to improve the indicator?

Data quality and the process used to report on drinking water system regulatory compliance are critical factors in determining the quality of this indicator. The current quality of the SWTR database is questionable in some states.

In an effort to improve the data for this indicator, EPA and the states are jointly pursuing a modernization initiative to upgrade and improve their drinking water information systems. EPA is replacing the Federal Reporting Data System with the Safe Drinking Water Information System. States are now testing the first components of SDWIS, which will improve both data quality and reporting of violations. With the cooperation of the states, EPA will be able to use SDWIS to improve the oversight and management of drinking water programs.

The objective of the SDWIS modernization is to improve the accessibility and quality of the drinking water data that EPA and states provide to the public. The SWTR database is now being integrated into SDWIS, which will make data management more efficient and improve data quality and analyses of program performance.

What is being done to improve conditions measured by the indicator?

Through aggressive action by EPA, the states, and the water systems themselves, the risk of human exposure to microbiological contaminants is being reduced. By the end of fiscal year 1995, the number of surface water systems not complying with the SWTR was reduced from 1,000 to 400. However, because most of the progress has been made in small and medium water systems, the population at risk has not dropped as dramatically—from 12 million to 9.9 million.

For More Information:

Water Environmental Indicators
EPA Office of Water
401 M Street, SW
Mail Code 4503F
Washington, DC 20460
(202) 260-7040 phone
(202) 260-1977 fax
Internet: <http://www.epa.gov/OW/indic>